AMENDMENTS TO THE SPECIFICATION

Please amend the Specification from p. 4, l. 9, to p. 5, l. 2 as follows:

~~As shown in Figure xxx, the~~ The NFL layer consists of retinal ganglion cell axons which are arranged into bundles of parallel fibers. This assembly of fibers is modeled as arrays of parallel, weakly reflecting nonabsorbing, dielectric cylinders embedded in a medium of slightly lower refractive index. The cylinder array model has been used to predict that the reflection of the NFL should be proportional to thickness, and that the backscattering reflection should be into a cone. The model has also been used to predict that the NFL possesses 'linear form birefringence' and behaves as a positive uniaxial crystal with optic axis parallel to the axis of the fibers. These predictions have been experimentally verified with some success; in particular, retardance magnitude has been shown to correlate well with NFL thickness. With more careful histology of retinal samples, it has been shown that a number of coaxial quasicylindrical structures of various diameters are present. As a result, the array model has been extended to include both thin cylinders (diameter ~ 1/10 of a wavelength) and thick cylinders (diameter ~ 1 wavelength). Considerable success has been achieved in using this model to explain experimentally obtained polarization measurements. Reported results indicate that the retina is a linear retarder, with retardance dependent on thickness; and that there is weak diattenuation and little depolarization on reflection. Reported retardance values are in the range of 2-4nm for NFL thickness of ~15um, corresponding to approximately 0.2nm/ µm.